UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,208	07/11/2003	Christopher F. Parker	149-0104US	4204

			EXAMINER
29855	7590	01/25/2006	HARPER, LEON JONATHAN

WONG, CABELLO, LUTSCH, RUTHERFORD & BRUCCULERI, P.C.
20333 SH 249
SUITE 600
HOUSTON, TX 77070

ART UNIT	PAPER NUMBER
2166	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
		10/618,208	PARKER ET AL.
Office Action Summary		Examiner	Art Unit
		Leon J. Harper	2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *11 July 2003*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-36* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-36* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *7/11/2003* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the application 10618208 filed on 7/11/2003.

Claims 1-36 are pending.

Claim Objections

Claims 29,30 are objected to because of the following informalities: "before

performing the instructions execute" Examiner suggests and will assume for the

purpose of this office action that the claim was meant to state "before performing the

instructions **to** execute." Appropriate correction is required.

Claim 35 is objected to because of the following informalities: Claim 35 states

"wherein the storage device computer comprise one or more direct access storage

devices". Examiner suggests and will assume for the purpose of this office action that

the claim was meant to state "wherein the storage device computer comprise**s** one or

more direct access storage devices" Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

    A person shall be entitled to a patent unless –

    (b) the invention was patented or described in a printed publication in this or a foreign country or in public
    use or on sale in this country, more than one year prior to the date of application for patent in the United
    States.

2.   Claims 1-7,9-19,21-29,31-35 are rejected under 35 U.S.C. 102(b) as being

anticipated by US 5396623 (hereinafter McCall).

As for claim 1 McCall discloses: receiving a database change command (See

column 6 lines 31-34); determining one or more portions of a target database that will

be affected by the change command (See column 6 lines 47-50 "editing the editproc");

creating one or more shadow portions of the determined one or more portions; changing

the one or more shadow portions in accordance with the change command (See column

6 lines 43-45); executing the change command against the target database (See

column 6 lines 54-56); swapping the one or more shadow portions for the determined

one or more portions (See column 7 lines 40-42), wherein the act of creating and

changing occur before the act of executing (See column 6 lines 43-55 "steps are in

order") and further wherein said database update method does not cause a user outage

(See column 9 lines 35-41).

As for claim 2, the rejection of claim 1 is incorporated, and further McCall

discloses: wherein the target database comprises a DB2 partitioned database (See

column 6 lines 62-64).

As for claim 3, the rejection of claim 2 is incorporated, and further McCall

discloses: wherein the database change command comprises an ALTER command

(See column 14 lines 25-29).

As for claim 4, the rejection of claim 2 is incorporated, and further McCall

discloses: wherein the determined one or more portions comprise one or more partitions

(Se column 9 lines 1-5).

As for claim 5, the rejection of claim 1 is incorporated, and further McCall

discloses: wherein act of creating comprises unloading the determined one or more

portions into work files (See column 9 41-46 "multiple shadow tables").

As for claim 6, the rejection of claim 5 is incorporated, and further McCall

discloses: wherein the act of updating comprises updating the work files in accordance

with the change command into one or more shadow portions (See column 11 lines 1-4

tables are made with the new information).

As for claim 7, the rejection of claim 1 is incorporated, and further McCall

discloses: wherein the act of updating further comprises updating the one or more

shadow portions to incorporate changes in the target database occurring since said act

of receiving and before said act of executing (See column 6 lines 43-46).

3.   As for claim 9, the rejection of claim 1 is incorporated, and further McCall

discloses: establishing a lock on the target database before said act of executing and

before said ad of swapping (See column 8 lines 11-14).

As for claim 10, the rejection of claim 9 is incorporated, and further McCall

discloses: removing a restricted state status from at least one of the determined one or

more portions resulting from the act of executing, said act of removing occurring before

the act of swapping (See column 9 lines 36-40).

As for claim 11, the rejection of claim 10 is incorporated, and further McCall

discloses: wherein the act of removing is performed after the act of establishing (See

column 9 lines 36-40 note catalog information is updated).

As for claim 12, the rejection of claim 1 is incorporated, and further McCall

discloses: committing the change command said act of committing to be performed

before the ad of swapping (See column 9 lines 9-14).

Claims 13-19 are program storage device claims corresponding to the database

method claims 1-7 respectively, and are thus rejected for the same reasons set forth in

the rejection of claims 1-7.

4.   Claims 21-24 are program storage device claims corresponding to the database

method claims 9-12 respectively, and are thus rejected for the same reasons set forth in

the rejection of claims 9-12.

As for claim 25 McCall discloses: a storage device having stored thereon a database, said first database having a plurality of partitions; and a computer unit operatively coupled to the storage device (See column 2 lines 13-19), the computer unit including a processor and a memory (See column 3 lines 15-20), the memory having stored thereon instructions for causing the processor to: receive a database change command directed to the database (See column 6 lines 31-34); determine one or more partitions of the database that will be affected by the change command (See column 6 lines 47-50 "editing the editproc"); create one or more shadow partitions of the determined one or more partitions; change the one or more shadow partitions in accordance with the change command (See column 6 lines 43-45); executing the change command (See column 6 lines 54-56); execute the change command against the database (See column 6 lines 56-60), swap the one or more shadow partitions for the determined one or more partitions (See column 7 lines 40-42), wherein the instructions to create and change are performed before the instructions to execute and further wherein said instructions to receive, determine, create, change, execute and swap do not cause a user outage to the database (See column 9 lines 35-41 and column 6 lines 44-52).

As for claim 26, the rejection of claim 25 is incorporated, and further McCall discloses: wherein the database comprises a DB2 database (See column 6 lines 62-64).

As for claim 27, the rejection of claim 26 is incorporated, and further McCall

discloses: wherein the database change command comprises an ALTER command

(See column 14 lines 25-29).

As for claim 28, the rejection of claim 25 is incorporated, and further McCall

discloses: unload the determined one or more portions into one or more work files (See

column 9 41-46 "multiple shadow tables") and change the work files in accordance with

the change command into the one or more shadow partitions (See column 9 lines 24-

26).

As for claim 29, the rejection of claim 25 is incorporated, and further McCall

discloses: wherein the instructions to update further comprise instructions to update the

one or more shadow partitions to incorporate changes in the database occurring since

performing the instructions to receive and before performing the instructions to execute

(See column 6 lines 43-46).

As for claim 31, the rejection of claim 25 is incorporated, and further McCall

discloses: instructions to establish a lock on the database after performing said

instructions to execute and before performing said instructions to swap (See column 8

lines 11-14).

As for claim 32, the rejection of claim 31 is incorporated, and further McCall

discloses: wherein the instructions further comprise instructions to remove a restricted

state status from at least one of the determined one or more partitions resulting from performing the instructions to execute, said instructions to remove being performed before said instructions to swap (See column 9 lines 36-40).

As for claim 33, the rejection of claim 32 is incorporated and further McCall discloses: wherein the instructions to remove are performed before the instructions to establish (See column 9 lines 36-40 note catalog information is updated).

5.   As for claim 34, the rejection of claim 25 is incorporated, and further McCall discloses: wherein the instructions further comprise instructions to commit the change command, said instructions to commit to be performed before the instructions to swap (See column 9 lines 9-14).

As for claim 35, the rejection of claim 25 is incorporated, and further McCall discloses: wherein the storage device comprises one or more direct access storage devices (See column 2 lines 15-19).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

6.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCall

as applied to claim 7 above, and further in view of US 5546536 (hereinafter Davis).

As for claim 8, the rejection of claim 7 is incorporated, and further McCall

discloses: incorporate changes in the target database occurring since said act of

receiving and before said act of executing (See column 6 lines 51-56) McCall however,

does not explicitly disclose: wherein target database log files are used to drive said act

of updating the one or more shadow portions. Davis however, does disclose: wherein

target database log files are used to drive said act of updating the one or more shadow

portions (See column 5 lines 15-21). It would have been obvious to an artisan of

ordinary skill in the pertinent art at the time the invention was made to have

incorporated the teaching of Davis into the system of McCall. The modification would

have been obvious because using a log file to incorporated changes is a simple way to

keep track of and make sure you do not lose any modifications.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCall

as applied to claim 19 above, and further in view of Davis.

As for claim 20, the rejection of claim 19 is incorporated, and further McCall

discloses: incorporate changes in the target database occurring since performing the

instructions to receive and before performing the instructions execute (See column 6

lines 51-56) McCall however, does not explicitly disclose: wherein target database log

files are used to drive said instructions to update the one or more shadow portions.

Davis however, does disclose: wherein target database log files are used to drive said

instructions to update the one or more shadow portions (See column 5 lines 15-21). It

would have been obvious to an artisan of ordinary skill in the pertinent art at the time the

invention was made to have incorporated the teaching of Davis into the system of

McCall. The modification would have been obvious because using a log file to

incorporated changes is a simple way to keep track of and make sure you do not lose

any modifications.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCall

as applied to claim 29 above, and further in view of Davis.

As for claim 30, the rejection of claim 29 is incorporated, and further McCall

discloses: incorporate changes in the target database occurring since performing the

instructions to receive and before performing the instructions execute (See column 6

lines 51-56) McCall however, does not explicitly disclose: wherein target database log

files are used to drive said instructions to update the one or more shadow partitions.

Davis however, does disclose: wherein target database log files are used to drive said

instructions to update the one or more shadow partitions (See column 5 lines 15-21). It

would have been obvious to an artisan of ordinary skill in the pertinent art at the time the

invention was made to have incorporated the teaching of Davis into the system of

McCall. The modification would have been obvious because using a log file to

incorporated changes is a simple way to keep track of and make sure you do not lose

any modifications.

Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over

McCall as applied to claim 35 above, and further in view of Davis.

As for claim 36, the rejection of claim 35 is incorporated, and further McCall dose

not explicitly disclose: wherein the one or more direct access storage devices are

operatively coupled to the computer unit by a computer network. Davis however does

disclose: wherein the one or more direct access storage devices are operatively

coupled to the computer unit by a computer network (See column 3 lines 3-4). It would

have been obvious to an artisan of ordinary skill in the pertinent art to have incorporated

the teaching of Davis into the system of McCall. The modification would have been

obvious because allowing for remote database changes will result in more flexibility and

will allow multiple users to modify the same information.

As for claim 37, the rejection of claim 36 is incorporated, and further McCall does not explicitly disclose: wherein the computer network comprises the Internet. Davis however does disclose: wherein the computer network comprises the Internet (See column 3 lines 20-27 note: the subsystems are each a network).

As for claim 38, the rejection of claim 36 is incorporated and further McCall does not explicitly disclose: wherein the computer network comprises an intranet. Davis however does disclose wherein the computer network comprises an intranet (See column 3 lines 4-6).

Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon J. Harper whose telephone number is 571-272-0759. The examiner can normally be reached on 7:30AM - 4:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

LJH
Leon J. Harper
January 18, 2006

MOHAMMAD ALI
PRIMARY EXAMINER

MOHAMMAD ALI
PRIMARY EXAMINER